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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,807	02/09/2004	Michael J. Duffy	TPL 0134 PUS	9247

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EXAMINER

KYLE, MICHAEL J

ART UNIT	PAPER NUMBER
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3677

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/774,807

Applicant(s)

DUFFY, MICHAEL J.

Examiner

Michael J. Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Germann (U.S. Patent No. 3,024,488) in view of Herzfeld (U.S. Patent No. 2,967,325). With respect to claims 1, 4, 5, Germann discloses a closure hinge comprising a mount (11), a pivot link (20), a pivot (25), and a spring (30) having a strand with a laterally coiled strand portion (see coiled portion in figure 4) extending from a first coil end (right side of coil in figure 4) to a second coil end (left side of coil in figure 4), and having a first strand end (on 32) at the first coil end (right side of coil in figure 4) and a second strand end (at 33) with a longitudinally extended portion along a longitudinal direction of the coiled strand portion toward a position at the first coil end, wherein the first and second ends bias the link and the mount near the first coil end. While Germann shows a longitudinally extending portion on the second strand end extending toward the first coil end, Germann does not disclose this portion to be of such a length that it extends all the way to a position at the first coil end.

3. Herzfeld teaches a spring loaded hinge used to bias two hinged elements in a predetermined direction. The hinge includes a mount (12) and a pivot link (16). A spring (26) includes a laterally coiled strand portion (28) with a first strand end (30) at a first coil end and a second strand end (33) with a longitudinally extending portion (32) extending from a second coil

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end to a position at the first coil end. This arrangement allows for a hinge to have a single inconspicuous coil spring in a hinge pin opening that acts both as a hinge pin and to bias the hinge (column 1, lines 16-18). Additionally, this arrangement reduces cost and adds aesthetic appeal (column 1, lines 40-42). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Germann as taught by Herzfeld such that the second strand end extends completely to a position at the first coil end to bias the hinge and reduce costs while adding aesthetic appeal. The combination results in the hinge spring of Germann being replaced by the known prior art hinge spring of Herzfeld. The spring is affixed to the mount and pivot link in the same manner as the spring in Germann.

4. With respect to claims 2 and 3, Germann, as modified by Herzfeld, shows the longitudinally extending portion (32 of Herzfeld) to be positioned coaxially within the coiled strand portion.

5. With respect to claim 4, Germann as modified by Herzfeld shows the first strand end (30 of Herzfeld) and the second stand end (33 of Herzfeld) terminate at a substantially coplanar position (substantially at the vertical plane defined by 11, see figure 4).

6. With respect to claims 6 and 7, the combination shows the first and second ends to include radially extending arm portions (30 and 33 of Herzfeld, 31, 32 in Germann). One of the arm portions (32 in Germann) has a terminal portion pivotally secured to the mount (at 34).

7. With respect to claims 8 and 9, the combination discloses both the first and second ends to include radially extending arm portions (31, 32 in Germann, 30, 33 in Herzfeld) having terminal portions. The first terminal portion is pivotally secured about a first spring arm axis (at 33 in Germann) to the pivot link (20), and the second terminal portion is pivotally secured about

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a second spring arm axis (at 34 in Germann) to the mount. The spring arm axis and the second spring arm axis are spaced from and parallel to the pivot axis flange (at 25).

8. With respect to claim 10, Germann discloses a method biasing a vehicle closure hinge comprising the steps of mounting a pivot axis flange (on 11) on a bordering structure, aligning a pivot link (20) adjacent the pivot axis flange, coupling the pivot link to the pivot axis flange (via 25), and biasing the pivot link about the pivot axis with a spring (30) having a laterally coiled strand portion (see coiled portion shown in figure 4). The spring has a first strand end (32) at a first coil end (right side of coil) and a second strand end portion (31) extending from a second coil end (left side of coil in figure 4) along a longitudinal direction of the coiled strand portion toward a position at the first coil end. The biasing acts about the pivot axis. While Germann shows a longitudinally extending portion on the second strand end extending toward the first coil end, Germann does not disclose this portion to be of such a length that it extends all the way to a position at the first coil end.

9. Herzfeld teaches a spring loaded hinge used to bias two hinged elements in a predetermined direction. The hinge includes a mount (12) and a pivot link (16). A spring (26) includes a laterally coiled strand portion (28) with a first strand end (30) at a first coil end and a second strand end (33) with a longitudinally extending portion (32) extending from a second coil end to a position at the first coil end. This arrangement allows for a hinge to have a single inconspicuous coil spring in a hinge pin opening that acts both as a hinge pin and to bias the hinge (column 1, lines 16-18). Additionally, this arrangement reduces cost and adds aesthetic appeal (column 1, lines 40-42). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Germann as taught by Herzfeld such that the second

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strand end extends completely to a position at the first coil end to bias the hinge and reduce costs while adding aesthetic appeal. The combination results in the hinge spring of Germann being replaced by the known prior art hinge spring of Herzfeld. The spring is affixed to the mount and pivot link in the same manner as the spring in Germann.

10. With respect to claim 11, Herzfeld shows the biasing to include aligning the second strand end (33) through the coil (at 32).

Response to Arguments

11. Applicant's arguments with respect to claims 1 and 10 have been considered but are moot in view of the new ground(s) of rejection. All claims are now rejected under section 103 based on the combination of Germann and Herzfeld. The new grounds were necessitated by applicant's amendments to the claims.

12. With respect to the claims previously rejected by the combination of Germann and Herzfeld, applicant argues there is no motivation for such a combination to be made. Examiner respectfully disagrees. Applicant reasons that because the spring Herzfeld is sized to fit in a hinge pin opening, that there is a substantial departure to combine with Germann because Germann lacks cooperating parts forming a hinge pin opening. Applicant appears to be bodily incorporating the features of Herzfeld into Germann. Germann discloses the majority of the structure. However, the spring of Germann varies slightly from the claimed spring, in that the second stand end is long enough to reach the first coil end. Herzfeld is cited strictly for the teaching of the spring, and more specifically, the arrangement of the coil and the strands ends

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relative thereto. Herzfeld does this for both functionality and to reduce costs and add aesthetic appeal, thus motivating the combination.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

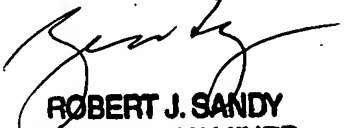
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Kyle whose telephone number is 571-272-7057. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mk



ROBERT J. SANDY
PRIMARY EXAMINER